

What is claimed is:

1. An optical fiber amplifier comprising:

a first and a second gain blocks, wherein each gain block
5 has a gain medium and at least one optical pump;

an optical fiber disposed between the first and the
second gain blocks;

a Raman pump for generating a pumping light; and

a coupling means for coupling the pumping light to the
10 optical fiber,

wherein the first gain block and the optical fiber have
opposite gain profiles, to thereby offset gain characteristics
each other and obtain a flat spectral gain profile.

15 2. The optical fiber amplifier as recited in claim 1,
wherein the optical fiber employs a material selected from the
group consisting of a dispersion compensated fiber (DCF), a
highly non-linear fiber (HNLF), a single-mode fiber (SMF) and
a combination thereof.

20 3. The optical fiber amplifier as recited in claim 1,
further comprising a gain flattening filter in order to
flatten gain characteristics.

25 4. The optical fiber amplifier as recited in claim 1,
wherein the gain medium of the first gain block employs a rare
earth doped optical fiber or a rare earth doped optical

waveguide.

5. The optical fiber amplifier as recited in claim 1,
wherein the gain medium of the second gain block employs a
5 rare earth doped optical fiber or a rare earth doped
waveguide.